REVIEWS.

ART. XX.—*A Treatise on the Principles and Practice of Medicine; designed for the Use of Practitioners and Students of Medicine.* By AUSTIN FLINT, M. D., Professor of the Principles and Practice of Medicine in the Bellevue Hospital Medical College, &c. 8vo. pp. 867. Philadelphia: Henry C. Lea, 1866.

TRUE poets are born poets. Art can do but little to perfect them; and the greatest have owed but little to art. But great physicians have always been the product of slow and persevering labour in the field of nature. All teachers, from Hippocrates to the last successful explorer of the mysteries of disease, have imbibed wisdom in the tainted and oppressive atmosphere that surrounds the sick bed. There only is a corrective to be found for the imperfections of previous conclusions as to matters of fact, and there is the only ultimate court of appeal against the dogmas of theory.

Scientific intuition, except in a figurative sense, is an absurdity. To the Creator alone belongs the power of originating either matter, force, or form, or of comprehending intuitively their laws. Man reaches the extreme limit of his genius, when a law of nature governing phenomena which are as unchangeable as the qualities of matter itself, is reached by an induction so rapid as to seem an intuition. It is only because those phenomena are in their nature simple and unvarying, that his feeble intelligence is able to discern the law which controls them. In this sphere one phenomenon stands for a thousand; to know one is to be acquainted with all. But in other departments of knowledge, phenomena are no longer identical; the apprehension of one is far from implying the understanding of any other; each must be studied by itself. Even then the phenomena of to-morrow may differ from those of to-day, and both from those of yesterday. Hence, instead of an unvarying model or formula being established, to which all future forms and phases of disease may be referred, instead even of a definition which shall represent, once and forever, the essential elements of a disease, its ideal image is perpetually undergoing modification. It is not an abstract creation of the mind, nor even the image of unvarying or constantly recurring and identical phenomena; it is only a faithful but imperfect picture which is continually becoming less imperfect as one detail after another is added to it of the natural object which it represents, and as one after another misrepresentation of reality which mars its truthfulness and unity is obliterated from the canvas.

Whoever would represent Medicine as it is, must possess some such idea as this of the task before him; and, while he carefully excludes all form and colour which nature does not authorize; while he renounces all attempts to fill up gaps in the chain of phenomena by links of his own forging, and to eke out what is incomplete by conjecture, he should omit nothing which is essential to the history and logical development of medicine as a science and an art, or nothing, at least, which is sanctioned by truth as well as hallowed by time. But a treatise on the whole theory and practice conceived in such a spirit, and faithfully executed, cannot be compressed within the limits of a single volume, nor even of two volumes like the one now before us, unless its author possess such a thorough mastery of the subject as will enable him to present its essential rather than its adventitious features, and preserve its unity without exaggerating its details. At the same time, if his work is intended for the learner and the ordinary practitioner, rather than for the scientific physician who seeks a solution, or, where that is impracticable, an enlightened discussion of the more intricate problems of pathology and therapeutics, he must take little for granted, and carefully winnow the mature and perfect seeds of knowledge from the crude and imperfect grain, and also from the chaff of false science and mere speculation.

We are happy to think that this object is very successfully attained in the work before us. The author speaks of it as a "Digest," of the "condensation" of its matter, and of the "conciseness consistent with clearness" which he has studied to preserve in its style. Avoiding amplification in language, and using illustrative cases very sparingly, he has, nevertheless, always made himself clearly understood, and he generally leaves upon the reader's mind, not only a distinct idea, but an impression that it has been clothed in the most appropriate words. Solid, compact, yet clear, it adequately represents the present condition of practical medicine as it could only be done by a physician who unites to scientific culture a large and well digested experience in the clinical study of medicine.

The fruits of his long and diligent observation are familiar to the readers of this journal by his numerous contributions to practical medicine, as they are to the profession generally by his works on the Physical Diagnosis of Diseases of the Lungs and Heart, and by his Clinical Reports on Continued Fevers, &c. Indeed, it would be difficult to name an American physician who, by the extent, variety, and accuracy of his clinical studies has a better right to speak with authority upon many of the subjects of his present work, or whose conclusions in regard to others respecting which his own observation may have been less extensive and minute, are more deserving of attention and respect. The most perfect treatise on a subject like the present must, from the necessity of the case, and for the most part, indeed, be a critical compilation. But, when it is the work of a critic who is practically familiar with the phenomena and laws of disease, the effects of remedies, and the principles of medical observation, it assumes a value second only to that of his personal experience.

Premising these remarks, we shall endeavour to give some notion of the work before us.

An introductory chapter is occupied with a summary account of the province of medicine as distinguished from surgery and obstetrics. Not only in this chapter, which deals very much with definitions, but generally throughout his work, the author displays conspicuously a quality of rare excellence in medical writers as well as in other literary men, the power, namely, of expressing his ideas in succinct terms of definite signification. This, which is comparatively easy in the description of phenomena, is exceedingly difficult when the subject is an abstract one, and when the mind is obliged, as it were, to create the object, as well as to find words appropriate for describing it. And here it may be remarked that the style of the whole work is remarkable for its conciseness and compactness, for the excellent order of its ideas, and for the fitting words in which they are clothed. Such qualities are incompatible with loose and vague ideas in an author's mind, and in the present instance may be presumed to be the consequence of his thorough acquaintance with the subjects he discusses. Indeed, they are most conspicuous in those chapters with which his previous publications attest his peculiar familiarity. Inequalities may be expected in the excellence of different parts on other grounds than that just referred to, and among them the author's peculiar tastes, his fondness for particular topics, his possible aversion to others, and his indifference to others still; but the reader should be content if no portion of the work be negligently executed, although some may bear marks of a peculiarly careful and even loving elaboration. As usual, in works of this sort, "The Principles of Medicine, or General Pathology," are treated of in several introductory chapters, although in a very summary manner. Yet the leading facts of the science of morbid anatomy, including the processes by which the lesions arise, are clearly and correctly set forth. One statement is made, however, which, we think, cannot be accepted as expressing the present doctrine in regard to tubercle. The author maintains that the term "tuberculous" should be restricted to yellow tubercle, and that there is no foundation for the idea, which originated with Laennec, that yellow is developed from gray or miliary tubercle. We have elsewhere shown in this Journal (July, 1861, p. 140) that Rokitansky, having abandoned the contrary opinion, reasserted the original doctrine of Laennec, adding that "the metamorphosis may commence so early and advance so rapidly as to make it seem as if the tubercle had been originally formed opaque and yellow;" and this, we apprehend, is the teaching of every authoritative pathologist, except Robin. Another statement which is liable to mislead, is that "a truly scrofulous deposit is identical with the tuberculous;" for it is unaccompanied by any sufficient declaration of the essential differences between scrofula and tuberculosis as diseases. It is, indeed, said that "clinical observation appears to show that they who suffer from scrofulous or tuberculous affections of the glands of the neck in early life are not more liable than others to pulmonary tuberculosis in after life;" but that is not by any means the whole truth. It would be much more correct to say that glandular scrofula seems rather to exclude pulmonary tuberculosis, and that, as complications of phthisis, tubercles may be found in almost every other organ and membrane rather than in the lymphatic glands.

The essential unity of the different forms of cancer is very well stated; but it is not made sufficiently plain that the differences in their gross forms depend chiefly upon the rapidity of their growth, and that there is no such thing as a specific cancer-cell. The author doubts that "the system becomes infected by the introduction into the circulation of matter derived from an existing cancerous affection;" but we may be permitted to suggest that the facts of the case do not support his conclusion, since nothing is more notorious than that the extension of cancer from organ to organ follows the anatomical relations and dependencies of the organs successively affected. While, also, it must be admitted, as he states, that a cancerous diathesis may be inherited, it must also be acknowledged that a hereditary taint can be traced in only a very small fraction (about 8 per cent.) of the cases; and, further, it is very certain that the usually recognized signs of the diathesis in question are the effects of the developed disease, and not the indications either of its imminent outbreak, or of a remote tendency to its production.

The articles on Transudations, Dropsies, and Degenerations are very clear, and, for the most part, accurate; but the value of the iodine test for amyloid degeneration is over-estimated. The changes of colour which attend its application are now known to depend upon mechanical causes, and not upon the presence of starch or any analogous substance. It is stated, under the head of Pneumatoses, that excessive distension of the stomach and bowels by gas must be accounted for by supposing it to be secreted by the mucous surface of these organs; but, apart from the impossibility involved in the supposition that such volumes of gas could be contained in the blood, it is now pretty well ascertained that the sudden distension of these cavities with gas proceeds from the equally sudden relaxation of their muscular walls; that it is, in other words, a nervous phenomenon. Every one must have noticed in certain cases of dyspepsia, how pressure on either side of the lower dorsal spinous processes will produce a sudden distension of the stomach, and sometimes abundant eructations of flatus.

The morbid conditions of the blood, plethora, anæmia, &c., are briefly but very clearly described. Plethora is defined "an increase in the number of the red globules," after Andral; but it is very certain that the mass of the blood is also increased in this affection, since vascular turgor is one of its most striking phenomena. There is no ground for coining a new word, *polyhæmia*, to designate a super-abundance of normal blood in the system. The condition in which the quantity of the circulating fluid is augmented, but its crasis impaired, is described by our author as pseudo-plethora. The appropriate and usual designation of this condition, serous plethora, he seems to have overlooked. Under *hyperinosis* there is an argument which, it seems to us, involves a grave error, since it is employed to sustain a practice which the experience of ages condemns. Blood-letting and low diet, we are told, increase the fibrin in the blood; now, an increase of fibrin in the blood is an effect of inflammation; *ergo*, blood-letting and diet promote inflammation! Such is the practical *reductio ad absurdum* of therapeutics in the school of Bruno redivivus. The fallacy lies in this: that the increase in the *proportion* of fibrin in equal quantities of blood, drawn on consecutive days during an inflammation, is made to represent the *absolute quantity* of fibrin in the blood. As an acute attack of disease advances, the blood disks decline both positively and relatively, because less food is assimilated than in health, and at the same time more blood disks become effete and perish; at the same time, also, the proportion of fibrin rises because disintegration continues, and elimination is checked. Necessarily, therefore, the disproportion between these two elements is ever on the increase when depletion is employed, since the source which supplies the one is cut off or obstructed, while access to that which supplies the other is not interfered with until the waste of the tissues has reached a very low point. Analyses of the blood, therefore, are insufficient to prove whether the absolute quantity of fibrin in that fluid is increased or diminished; and consequently the proposition that depletion and diet augment the fibrin or favour inflammation is an unwarranted assumption, as well as a direct contradiction of the medical experience of all ages. The associate proposition that food and stimulants are the appropriate, rational, and specific remedies for inflammation or for hyperinosis, however induced, is one which, in spite of the doctors, nature revolts at, and manifests her repugnance by a loss of appetite, and an aversion to food which amounts often to a loathing, while she equally signifies her desire to promote the waste of tissue by a craving for water which is often incessant and insatiable. We are perpetually witnesses of her ineffectual struggles under the fashionable system of therapeutics, which kills with well-meant but most pernicious kindness, perhaps as many as were at one time sacrificed to the lancet, mercury, and perturbative drugs of all sorts. Unfortunately, the temptations of the physician to active interference with the course of disease seem to be irresistible. He has a lurking suspicion that his mission is unfulfilled, or at least will seem to be so, unless the patient is made to pay both in person and in purse; and hence he acquires a habit of treating nature as if she were a laggard in her duty, and required to be smartly pricked at times to prevent her slumbering at her post. Or, finding that the more fastidious of his sick revolt at the heroic and repulsive doses he prescribes, and exhibit a perverse tendency to run off into moonshine medicine, he keeps them faithful to him, or lures them back by a system as simple as that of a famous quack, whose motto was, "Life is heat, Disease is cold," and, by gorging them with dainties and alcohol, at last puts out fire by fire, if, haply, in the process the patient's life be not extinguished.

In the succeeding article upon coagulation of the blood, which presents an excellent summary of the facts and relations of this subject, our author is again drawn into an error, as we consider it, when to the question, "Does buffed and cupped blood, when it denotes an excess of fibrin, constitute an indication for blood-letting?" he answers, "Certainly not, for blood-letting tends to increase the fibrin, and diminish the globules;" but he adds, "The propriety of bleeding must therefore rest on other grounds." These grounds are indeed not indicated, perhaps because they would have been out of place in the actual discussion; but there is left upon the reader's mind an impression that the pathological objection just stated is an unanswerable one; whereas, if the reflections we have made above are just, the objection is totally without validity on correct pathological grounds, as well as on that of experience. Indeed, the topic appears to us to be precisely one of those which most forcibly illustrate the danger of founding practice upon theory. A little further on, we meet with an instance of the same sort. It is stated that Dr. Richardson has attempted to show, and the author regards his explanation as probably true, that the fluidity of the blood is preserved by the presence of ammonia in it. It is added, that this medicine is now administered with a view to maintain the liquidity of the fibrin in the blood in certain cases of hyperinosis. It would follow that ammonia must be strongly contraindicated in whatever diseases are characterized by an impaired coagulability of the blood. But, if so, what becomes of the testimony of the whole world in favour of ammonia in typhus fever, and in poisoning by venomous serpents and insects, affections in which the crasis of the blood is notoriously impaired? But here, as in the other case, the theory, like so many others, rests upon an insecure foundation; for the reader need not be told that the conclusions of Dr. Richardson are very far from from being accepted by physiologists, many of whom deduce very different consequences from the experiments themselves.

Several articles follow on the increase and diminution of albumen, water, fat, sugar, and excrementitious substances in the blood. It is said to be "not improbable" that the vapour of the expired breath contains excrementitious principles. No allusion is here made to the presence of ammonia in this exhalation during typhus fever, uræmia, &c. Cholæmia and pyæmia are considered in this connection, and the more precise elements of knowledge at present existing in regard to viruses, miasms, venoms, and poisons are succinctly but clearly set forth. In a subsequent article, the doctrine of the primary origin in blood changes of all diseases arising within the body is maintained in a brief but satisfactory argument. Three chapters on etiology, symptomatology, and general therapeutics conclude the first part of the work.

We cannot take leave of this portion of the treatise without a more special reference to its principal subjects, general pathology and morbid anatomy, nor without reiterating the surprise which has often been expressed, that among the leading medical schools of America one only possesses a chair of pathological anatomy. In all of them, the professor of the theory and practice of medicine is supposed to afford instruction upon that branch of medical science; but it is abundantly evident that his time is wholly insufficient for a complete account even of the clinical relations of disease. At every step of his course he is obliged to assume the existence of a knowledge respecting morbid processes and products, on the part of his pupils, which he is sure that they do not possess, even in reference to individual diseases; and that far less can they be supposed acquainted with the nature, mode of development, tendencies, and effects of morbid processes, as they are presented in diseases which are nosologically and clinically different. General ideas of disease they have next to none; and the longer they sit under the instruction, whose great deficiency we deplore, the more they become fixed in the error that diseases are separate entities, like so many plants or animals, and the less they recognize in them their genuine characters as various disorders of the same living organic whole. How fruitful a source this is of scientific error, how powerfully it tends to render physicians routinists in practice, and credulous of every novelty, provided it be only asserted strongly and persistently, must be evident to every observant and reflecting man, whose public training or whose self-education has enabled him to survey the field of medicine from an elevated position. If medicine were taught as it should be; if in every medical college general pathology and morbid anatomy entered into the ordinary curriculum, we should less frequently observe than now a neglect of the purely scientific branches upon the ground of their not being "practical;" for it would then be apparent that chemistry and physiology are the only keys which can unlock the doors which conceal the secrets of life and disease, and that no idea of disease can be complete, or even accurate, which does not embrace that of its accompanying changes of structure, and of their mode of production.

The Introductory Chapter of Part II., embracing the great body of the work, and devoted to "Practice of Medicine or Special Pathology," contains some very accurate definitions, or short descriptions, of the principal terms to be employed such as "Clinical History," "Pathological Character," and "Disease" itself. No novelty in classification is attempted, but the usual division adopted into General and Local Diseases. General diseases are, however, contrary to the usual custom, treated of last, instead of at the beginning of the work, an innovation which, we think, is hardly justified by convenience or sound logic. Again, in the first Section, comprising diseases of the respiratory system, pleuritis and several other affections of the lungs precede diseases of the larynx, which, in turn, are followed by pulmonary tuberculosis. This arrangement, also, appears to be nardly justified by reason or convenience.

As might be expected from an author who has already written so ably upon diseases of the lungs and heart, the chapters which he devotes to these subjects are remarkable for their clearness and completeness, although, as it is his right to do, he refers for many of the minuter details to his special works upon these subjects. Speaking of the effusion in pleurisy, it is mentioned that where general adhesion in one pleura has been permanently established, causes which occasion hydrothorax on the opposite side may produce œdema of the lung on the side where the adhesions exist. Of this peculiarity we have recently met with an example in a lady who laboured under general dropsy produced by obstructive mitral disease. The author does not furnish a separate account of subacute pleurisy, although he speaks of it as a variety of frequent occurrence, a statement in which we fully concur. We have repeatedly been consulted by persons having a pleural cavity entirely filled with fluid without any symptom whatever pointing to the chest as the seat of disease; and, even while writing this page, we were called on by a medical gentleman who discovered, only by accident, that he had a pleurisy of the left side; and yet so copious was the effused liquid that it had dislocated the heart, whose apex we found beating half-way between the sternum and the right nipple.

In the treatment of acute pleurisy the author concludes that depletion is rarely necessary, but that, nevertheless, it tends materially and immediately to the patient's relief when he is plethoric, oppressed, and suffering severe pain. We are convinced that it is infinitely safer and less exhausting, as well as more useful, than tartar emetic, digitalis, aconite, or veratrum viride, which we are told diminish the frequency and the force of the heart's action. The author is too sound a pathologist to suppose that any or all of these medicines which merely depress the heart, can as favourably influence the inflammatory process, as can bleeding, or purgation, which depletes the vessels of their liquid contents; nor will he regard as indifferent the horrible nausea, the sense of sinking, or the downright syncope and death-like exhaustion which these agents are liable to produce if they exert any influence whatever. In some general remarks upon bloodletting he dissents from the opinion held by some that diseases have undergone a notable change during the last quarter of a century, and that bloodletting and other antiphlogistic measures are less appropriate now than formerly, on this account, and he expresses a conviction that antiphlogistic measures were no more appropriate then than now. Upon this question it is well known that men of the most enlightened and enlarged experience hold opposite opinions. In England authorities are divided, and we imagine that an equal divergence may be found among ourselves. A not inattentive observation of disease during the last thirty years has convinced us that the medical constitution changes during comparatively long periods, as it notoriously does within shorter spaces of time. We cannot for a moment admit, with our author, that to accept the occurrence of such changes as real would strike at the root of medical experience, and that they would render impossible permanent principles of practice in medicine. The phenomena of disease and diseases themselves are strikingly different in different climates and localities. The pupil of Parisian teachers who practises in Algeria, the British physician whose field of duty is in the east, our own northern graduates who dwell on the alluvial bottoms of the south, or on the distant shores of the Pacific Ocean, have all to learn new lessons, and modify those which their teachers inculcated in regard to the genius and the treatment of disease; and yet it would be preposterous to assume that on this account there are no permanent principles of medicine. In regard to this very subject of venesection, it is very certain that southern nations, who live chiefly on vegetable food, are as intolerant of it and of other depletory measures, as the meat-eating tribes of the north support such evacuations well. If these things be so, is it incredible that in the same climatic region the genius of disease may from time to time undergo modifications, more permanently and on a larger scale, but of the same nature as those which constitute the familiar epidemic constitution? While maintaining an opinion opposed to our author's, we do not overlook the influence of fashion in medicine, nor hesitate to admit that few remedial measures have been more abused than depletion, because few, if any, can be mentioned more susceptible of abuse; but we have little hesitation in predicting that a remedy which has been in almost constant use since medicine became an art, will one day be as much in vogue as ever, and that a new cohort of Sangrados or Broussais will again abuse it to the prolongation of disease, the permanent injury of the health, and the peril of life itself.

In a subsequent paragraph our author lauds the use of opium as an antiphlogistic in acute pleurisy, as he does elsewhere, this virtue of the drug in other acute inflammations. Nearly all that he says of its power to eliminate pain and restlessness from the symptoms, and consequently to limit the inflammatory process to a greater or less extent, is in conformity with the well-established results of experience, as well as the advantage of prefacing its employment by that of bloodletting and other evacuants. After prescribing the manner in which tartar emetic and veratrum viride should be used, he adds that their importance is somewhat questionable. We take it to be even more than questionable, and even, as he says of the use of mercury and iodine employed as sorbefacients, objectionable. The latter of these medicines, as an external application, he properly considers of doubtful efficacy.

In the chapter on chronic pleurisy the author reiterates his previously published opinion, that the disease does not predispose to pulmonary tuberculosis, an opinion sustained by the observations of Dr. Blakiston, and which our own experience leads us to confirm. A curious case is related of a man in whom, after death, the left pleura was entirely lined by a chondroid formation from one-eighth to one-quarter of an inch in thickness, and so rigid after removal as to retain the shape of the cavity. It contained about two gallons of turbid liquid. The operation of thoracentesis is spoken of as innocuous. A case, which we think must be very rare, is mentioned, in which spontaneous perforation of the thoracic walls took place, although the effusion was not purulent. Under pneumo-hydrothorax it is stated that this condition always implies the existence of a communication with the external air through bronchia or else through the parietes of the chest. We have met with a case in which no such history could be discovered, but only that of an acute pleurisy with bronchitis occurring in a perfectly healthy man. It is, however, quite possible that a minute vomica, or a very limited emphysema, may have existed which occasioned a perforation of the pleura. A very interesting case is related by the author of simple pneumothorax produced, apparently, by carrying a heavy weight upon the back.

The subject of pneumonitis is treated in a very superior manner, as might be expected from the author's large experience and minute study of this disease. It is interesting to observe that he found the right lung was attacked more frequently than the left in the ratio of 1.7 : 1; while Grisolle in his classical work on this subject gives the ratio of 1.8 : 1.

In the remarks upon the rate of removal of the exudation it might we think, have been stated, that this process is materially retarded by the presence of articular rheumatism, perhaps because the blood then becomes overloaded with fibrin. Such cases are not uncommon, and are, we have remarked, singularly tedious. The complication with periodical fever is alluded to, but the cases are not particularly mentioned in which the special phenomena of pneumonia are exhibited only during the paroxysms of the periodical affection. The pathological character of the disease is correctly stated to be an inflammation of the tissue lining the air cells, and not, as it is sometimes described, of the inter-vesicular connective tissue, a tissue which there is good reason to believe does not exist except upon the limits of the lobules. The influence of season in the production of this disease is not, perhaps, as accurately estimated as it might be; for, although it is very true, as our author remarks, that pneumonia everywhere prevails during the winter more than during the summer months, this effect he maintains, is clearly not attributable merely to cold, since he himself observed more than twice as many cases in March and April, as he did in January and February. So Grisolle (2d ed., 1864) states that out of 553 cases of pneumonia 104 occurred in April, and it appears that he met with nearly twice as many in March and April as he did in January and February (186 and 100). These results help to explain and justify our author's statement that "in this country the disease occurs in the Middle and Southern much oftener than in the Northern States." In the former, he remarks, it is emphatically the prevalent disease during the winter months, affecting especially the negro population. In a word, pneumonia is peculiarly apt to be produced, not by cold merely, but by cold and dampness acting upon persons debilitated and rendered morbidly susceptible to their influence by insufficient protection against inclement weather, as in the South, or by the abrupt vicissitudes of temperature which mark the close of winter and the beginning of spring in the North, and the incautious changes of clothing which are then indulged in. That it should be a more fatal disease in the Southern than in the Northern States, as the author alleges, is also explained by the more enervating influence of the climate in the former.

The author takes especial notice of the liability there is, in this disease, to death from the coagulation of fibrin in the right cavities of the heart, an event which he regards as of not infrequent occurrence, but which he thinks has not been sufficiently considered. They have, however, been fully described by Bouillaud and by Grisolle, although it is true that the latter appears to believe that the disorder of the circulation they give rise to is usually neither permanent nor fatal. Many years ago we reported a case (*Med. Examiner*, Jan. 1840) in which, along with double pneumonia and pericarditis, there was a large, firm, and pale coagulum in the right cavities of the heart, covered by a perfect membrane which had the aspect of a serous membrane.

Of the treatment advised in pneumonia we need only say that it is, on the whole, stimulant and supporting. Depletion is not excluded, but, on the contrary, admitted "in certain cases, as a palliative, and, perhaps, to some extent, as a curative, measure;" and sometimes, we are told, when this most powerful antiphlogistic remedy would be unsafe, it may be prudent to employ tartar emetic, veratrum viride, and saline purgatives; but opium is the main dependence in the second as well as the first stage; and in the second the leading general indication is to support the powers of life, with more or less activity according to the greater or less predominance of the asthenic type.

In a short article on chronic pneumonitis the opinion of Rokitansky is quoted that "the exudation takes place into the inter-lobular and inter-vesicular areolar tissue," an opinion irreconcilable with the anatomical fact that no such tissue as that last mentioned exists. Besides, if the deposit leads, as it is said to lead, to a diminution of the volume of the affected portion, the condition of the tissue would seem to be more analogous to collapse of the lobules.

Our author throws doubt upon the common supposition that primary bronchitis is generally, or even frequently, produced by the action of cold, and thinks it reasonable to conclude that the disease is due to some morbific agent in the atmosphere, or some special atmospheric change. No plausible reason is alleged to support this scepticism upon a point of universal faith. Among the rarer dangers of this disease is one that might have been alluded to, its occurrence during paralysis of the external muscles of respiration. We have recently attended a little girl who had been for several months affected with general paralysis produced by an injury of the cervical portion of the spinal cord, or rather of its membranes. She was steadily recovering when she caught cold by lying too near a window during extremely cold weather; general bronchitis supervened, and her only available respiratory muscle, the diaphragm, being insufficient for expelling the bronchial secretions, she perished by slow asphyxia. The action of the chest in this case resembled that which occurs in emphysema of the lungs, the lower, anterior, and lateral portions being drawn inwards during respiration by the contraction of the diaphragm. The movement alluded to is described by the author of this work in his excellent article on pulmonary emphysema, but its mechanism is not explained.

In the introductory remarks to diseases of the larynx the author mentions a case of loss of the epiglottis, in which, after the ulcerated parts had healed, liquids and solids were swallowed without much inconvenience, and the quality of the voice underwent but little change. Cases of the same sort are narrated by Gibb and others, and they help to prove the extreme importance of laryngoscopy; for, before its introduction, the integrity of the epiglottis was thought to be essential to both deglutition and phonation.

The articles which treat of Laryngitis are marred by some peculiarities of nomenclature and arrangement which, it seems to us, obscure the subject greatly. The first affection is termed "Acute *Ordinary* Laryngitis," and yet the reader is told that in the adult it is so rare that practitioners of considerable experience may have never met with an example of it. Moreover, it is afterwards stated, and with apparent inconsistency, that *subacute* inflammation of the larynx is of frequent occurrence. The term "ordinary" in this connection is therefore a misnomer, or else the statement concerning the rarity of the disease is an error. Again, "subacute laryngitis" is made to stand for "catarrhal croup," an affection whose physiognomy is totally different, and is rendered so by the presence of a spasmodic element. This last form of laryngeal inflammation, one of the most common, and to parents a very alarming, affection of children, and which is familiar to most medical men as spasmodic laryngitis or spasmodic croup, is denied by our author the honour of even a separate and independent status, and is dismissed in half a page as a variety of spasm of the glottis. This is a most singular oversight; for spasm of the glottis is purely and simply a reflex spasm excited by disease elsewhere than in the larnyx; whereas spasmodic laryngitis, as its name implies, is an affection of the larynx itself in which an inflammatory and a spasmodic element are combined. It is not, as the author states it to be, "purely spasmodic," but is very generally both preceded and followed by catarrhal symptoms. Finally, the name "œdema of the glottis" is restricted to a serous or dropsical effusion in the areolar tissue beneath the mucous membrane above the vocal cords, when it would be more correct to describe this œdema as an effect not only of general blood disorders, but also of inflammatory and ulcerative diseases of the larynx, and to recognize, with Dr. Gibb, a supra-glottic and a sub-glottic form.

Apart from these defects, as we deem them, the description of the symptoms of the several laryngeal affections is clear, and the rules given for their management judicious. But we are obliged to notice one or two exceptions. The cough in pseudo-membranous laryngitis is described as "shrill, barking, crowing, as if the sound were produced within a metallic tube, the *tussis clangosa* of Cullen, and accompanied frequently by sonorous or stridulous breathing." These terms are perfectly applicable to the cough of spasmodic laryngitis; but the cough of croup with false membrane is hoarse at first, then rapidly becomes smothered, and finally loses its sonorous quality altogether. Indeed, there is hardly a symptom of this fatal disease more characteristic than the *smothered* cough. The treatment recommended for croup is, for the most part, judicious; but the following language is very open to criticism:—

> "The introduction of the sponge probang into the larynx of the child is difficult, owing to the small size of the glottis, and, frequently, the want of co-operation on the part of the patient; yet, it may be effected. I have witnessed a recovery in a case in which this was the chief measure relied upon. The applications were made twice daily. When the false membrane is loosened, the introduction of the sponge may be useful mechanically, detaching the membrane and pushing it below the glottis."

We suspect that these statements were written without mature consideration. It must have been forgotten by the author how overwhelming and conclusive is the experimental evidence against the possibility of the operation in question, even in cases of adults, published by the physicians of his own city, and must have overlooked the statement made by himself a few pages before, viz., "The exudation may not extend below the larynx, but *as a rule it takes place in the trachea*," so that the operation, even if it were feasible, would certainly tend to compact the exudation, and render the trachea altogether impervious, rather than to free it from the existing obstruction. Even Dr. Gibb, specialist though he be, and reputed very expert in laryngeal operations, gives no countenance to such an operation, but advises only the employment of "the spray of a solution of nitrate of silver."

A case is related by the author which, it seems to us, should have weight in the question whether, in many cases of chronic laryngeal obstruction, it might not be well to establish a permanent opening in the trachea.

> "A patient aged about forty, admitted into the wards in Bellevue Hospital, suffering from the effects of a debauch, had a fistulous orifice in the anterior portion of the trachea large enough to admit the end of the forefinger. This fistula followed a wound received in a fracas, and had existed for seventeen years. It occasioned little or no inconvenience in respiration."

As might be expected, the chapters treating of pulmonary tuberculosis are worthy of the author's reputation in this department of medicine. Of late years, certain medical writers, having apparently in view a vain and ephemeral popular applause, with its contingent gains, rather than the slower but more lasting approbation of professional judges, have ascribed certain symptoms and signs to what they are pleased to call "the pre-tuberculous stage" of pulmonary consumption. Of this the author mildly remarks that it "cannot be considered as established by clinical observation." The moderation of this judgment is, indeed, characteristic of his criticisms generally, and, perhaps, is most becoming in a purely didactic treatise; but one cannot help suspecting that so competent a judge must have had his equanimity frequently disturbed by current dicta and opinions which his own observation had proved to be not only erroneous, but groundless. Several writers, and some of excellent and deserved reputation, have also described dyspepsia as apt to precede the development of phthisis. But our author, who has certainly both possessed and taken advantage of opportunities as great as theirs, merely remarks: "If this be so, the ailments are not, as a rule, of a striking character." This, it appears to us, is stating his dissent in a less emphatic form than the case requires; for, certainly, among dyspeptics phthisis is a most unusual sequence of the digestive derangement, and among consumptives it is not very unusual for appetite and digestion to continue unimpaired until the end. Only a few weeks ago we lost a patient, a lady who passed through all the normal stages of chronic consumption, first in the left and afterwards in the right lung, and who, to the day of her death, ate, and with a good deal of relish, and always without any gastric disturbance, a great variety of solid and liquid nutritious food. Such cases, although numerous, do not certainly form the rule, which is that appetite and digestion sooner or later become impaired, as in the course of all chronic and wasting diseases

In his remarks on the extremely unequal duration of chronic phthisis, the author states that he has a patient under observation in whom there is reason to believe it has existed for forty years. Such cases are sometimes seized upon by carping critics as throwing doubt upon the diagnostic skill of the physician, and it is well to have such an authority as the present one to appeal to in confirmation of an opinion well founded in fact. In another place he condemns the opinion, industriously propagated by certain persons, that chronic pharyngitis has a tendency to eventuate in pulmonary tuberculosis. He furnishes some striking illustrations of the mortality caused by the disease in certain families, even where the parents and their ancestors were free from the tuberculous taint. He also affirms, as the result of a special examination of the question, that scrofulous disease of the lymphatic glands in early life does not predispose to tubercular consumption. He is of opinion that the mortality from this disease "has undoubtedly diminished within the last ten or fifteen years," and thinks that "this must be obvious to medical observers whose professional experience extends backwards a quarter of a century or more," as well as deducible from the mortuary reports of Great Britain and of our own large cities. We think there is reason to apprehend that this statement is more favourable than is warranted by the facts of the case. The impressions of physicians upon such questions are evidently of little value; statistical results alone are worthy of any trust; and even these are open to a great many doubts. To mention one only, erroneous diagnosis; it is certain that deaths by various wasting pulmonary diseases, which were formerly reported as deaths from tubercular phthisis, are now found under the head of *bronchitis* and elsewhere. Moreover, it must be remembered that the population is all the time rapidly increasing in most cities, and by the addition of a class more hardy than the original inhabitants, and of a greater average age than theirs. Again, if we take, in Paris, for instance, the annual mortality for a decennial period, as Boudin has done for that between 1839 and 1850, we find that the rate of mortality from consumption is positively increased, and not diminished. Sanitary improvement is, much more probably than the treatment of disease, the cause of whatever diminution of the death-rate is ascertained to have occurred in any place from which authentic and trustworthy returns have been made.

The author concurs with Walshe, Ware, and others, in believing that the prognosis is more favourable in cases characterized by the repeated occurrence of hæmoptysis than in others; he is of the opinion that laryngitis also is favourable, excepting the cases of it in which the epiglottis and top of the larynx are involved; and entertaining a similar opinion of perineal fistula, he advises that it should be allowed to continue without surgical interference. This advice is contrary to that of some surgeons, whose competency in the question may, however, without offence and fairly, be questioned.

The treatment of pulmonary consumption advised by the author contrasts strongly and strangely with that multifarious medication which is recommended in many works even now, and a few years ago was with vain prolixity set forth in all which discussed this subject. The question, Is the tuberculous cachexia removable by any known special remedy or remedies? he answers distinctly in the negative. The only measures indicated are those which tend to strengthen and invigorate; and the hygienic are infinitely more important than the medicinal. Exercise and nutritious food are the fundamental and essential elements of the treatment; the one to create appetite, the other to promote assimilation. "Let good digestion wait on appetite, and health on both." The author illustrates the influence of these agents, with particular reference to exercise in the open air, and to the use of alcohol and cod-liver oil, and cites many cases of apparent, if not of absolute, cure by their means. He notices a remarkable fact, which we have also observed, that in some cases of phthisis there is a singular tolerance of alcohol so long as the health remains impaired, but that when once the strength and flesh have been restored it begins to act as an intoxicating drink, and cannot be continued in the usual doses. This curious circumstance has a striking analogy in typhus fever, in the typhoid state, and in many asthenic conditions. He also calls attention to another well-established fact, that neither alcohol nor cod-liver oil affects all cases of consumption favourably. Some are utterly intolerant of both of these medicines. He passes in review and condemns several of the more recently proposed specifics; and remarks that he "can say nothing of the attempt to inject tuberculous cavities with a solution of nitrate of silver, &c." To say even this is perhaps over-much. Certain persons and their acts acquire a tinge of respectability from the merest notice of honest men.

Among the inflammations which it was formerly considered unsafe to treat without mercurialization is pericarditis; and, unless we are greatly mistaken, not a few practitioners consider it essential still. We are glad, therefore, to find a very decided opinion upon this subject expressed in the present work, the more so as it has been reached in spite of contrary impressions, not only entertained, but published, by the author. Since the publication of the opinion referred to, he says, "I have treated the cases of pericarditis which have come under my observation without mercury, and I have found no reason to be dissatisfied with its omission." In this, as in other acute inflammations, he considers opium to be invaluable, and dwells on the importance of promoting the nutritive functions and supplying nutritious food when the active stage of the disease has passed.

The author adopts Dr. Richardson's theory of the genesis of endocarditis, ascribing it to an excess of lactic acid generated by the passage of the blood through the lungs in acute rheumatism. The theory appears to fulfil all the essential conditions of a correct one. Speaking of the murmurs in endocarditis, particular allusion is made to the fact that the most usual murmur is loudest near the heart's apex, while there is no reason to suppose it to be regurgitant, through mitral insufficiency. "It is an intraventricular murmur," the author remarks, "or it may be called a *mitral systolic murmur*, this term not implying the occurrence of regurgitation." This account is, perhaps, open to misinterpretation, for it is not evident how a murmur can be at once intra-ventricular and mitral, and yet not regurgitant; the term mitral being usually made to designate the left auriculo-ventricular orifice and the portions of the valve in immediate connection with it. It is possible, certainly, that a murmur may be generated *in the ventricle*, independently of mitral obstruction, but we do not possess any evidence of the fact. It is certain, also, that the mechanical relations of the mitral valve found after death in acute endocarditis do not lend themselves to the support of the supposition that the murmur in question is regurgitant. In fact, the only rational way of explaining most of the instances of mitral murmur in acute endocarditis is to regard them as generated by the direct current of the blood forced or drawn through the mitral orifice. It is, indeed, alleged by high authority that direct mitral murmurs are never recent; but perhaps it would be quite as correct to say that recent mitral murmurs are never regurgitant, since we are not acquainted with any demonstration of valvular insufficiency in acute endocarditis.

Among the causes of functional disorder of the heart, the author might have mentioned exhaustion from prolonged lactation, which is not always the same thing as anæmia; and exhaustion from extreme muscular fatigue, as in those numerous cases which were met with among soldiers during the late war. Speaking of the association of organic lesions and functional disorder, the very important remark is made that the aggregate of the symptoms present are often erroneously referred to the more permanent cause, and, consequently, that a graver prognosis is apt to be formed and pronounced than the circumstances really warrant. The prognosis in angina pectoris is very properly stated to be grave. Still, there are cases which should render a physician cautious in prognosticating a fatal issue. Some years ago we were consulted by a clergyman, who, without having had any known cause of heart disease, became subject to attacks of severe and well-marked angina pectoris. He presented a distinct and slightly rough basic systolic murmur. Treatment of mild dyspeptic symptoms and caution in regard to exercise were enjoined. At the end of a twelvemonth the paroxysms had become less frequent and severe, and the murmur was fainter; and after another year both had entirely ceased. Our author does not mention ethereal inhalations among the palliatives of the painful paroxysm. Judiciously employed, they are more efficient than other anodynes.

The third section, treating of diseases affecting the digestive system, opens with dysentery, an unusual arrangement, and one not justified by any sufficient reason. The disease in question is pretty fully treated of, but its forms are not accurately distinguished. Its contagiousness is denied, without good grounds, as we believe. There seems to us superabundant proof of its being contagious in the same way as cholera, through the alvine evacuations of the sick. The treatment inculcated by the author excludes the once classic calomel and opium, and includes purgatives and opium, the latter in very large doses. A case is referred to of a male patient, not habituated to the use of opium before his illness, who gradually reached the dose of one grain of sulphate of morphia every hour for several consecutive days, without any narcotism. In another case two grains, hourly, of opium were given for the space of a week. Of course such doses are not recommended; but the facts just stated illustrate the remarkable tolerance of opium which is sometimes noticed in this disease. We hope to be pardoned if we doubt that they are ever necessary.

Acute enteritis is described as a separate disease—that is to say, as independent of substantial lesions of the bowels, such as morbid deposits—and also as a different affection from diarrhœa. If the latter, arising from atmospheric changes, be excluded, and also the enteritis of young children, which, after all, is rather an entero-colitis, or even an inflammation involving the entire digestive tract, it is not easy to see what cases remain to represent enteritis, except those produced by corrosive poisons. It may very truly be said, as it is by the author, to be "a rare form of disease after infantile life." Remarks of a similar kind are measurably, but in a far less degree, applicable to gastritis. In speaking of this disease, the author omits noticing two occasions of its occurrence which are more frequent than all of the rest united. We refer to remittent and yellow fever. In the latter, gastritis occurs in its most exquisite form; and in the former it is associated with duodenitis. An excellent description is given of the different species of pharyngitis; but there is one of frequent occurrence, and which is different from the erythematic in this, that, while it presents less redness and swelling of the pharyngeal mucous membrane, it occasions infinitely more pain in deglutition; indeed, that symptom constitutes its most striking peculiarity. We denominate it rheumatic pharyngitis. Reference is made to an interesting variety, "epidemic simple acute pharyngitis," of which the author recorded numerous examples in 1864. It appears to have been a very mild form of diphtheria, for cases such as he describes are frequent when diphtheria prevails. Of the chronic form of pharyngitis, called follicular, which has been so dishonestly abused, to the disgrace of certain members of the medical profession, and to the alarm and serious injury of confiding patients, the author says:—

> "The inflammation has no tendency to pass into the laryngeal cavity." "Patients with this affection seldom become tuberculous; its existence is, to some extent, evidence of the non-existence of tuberculosis. It is a popular notion that this affection denotes a consumptive tendency, and this notion is encouraged by a host of irregular practitioners, who, within late years, in this country, have made diseases of the throat a specialty."

As was long ago taught by Professor Chapman, the author declares that the treatment, to be effective, must have reference to the system. "After considerable experience," he adds, "I have come to regard topical applications as generally of little or no value."

A very precise, and, for the nature of the work, a sufficiently detailed account, is furnished of induration, softening, simple ulcer, and carcinoma of the stomach. Here and there a statement may be found of doubtful accuracy. Thus, in the history of simple gastric ulcer, it is said, following Dr. Brinton, that "there is no foundation for the idea that hemorrhage from the ulcer occurs vicariously in the place of menstruation." This statement is altogether too exclusive. Indeed, the author himself, when elsewhere speaking of gastrorrhagia, expressly admits that "it may occur in place of the menses in cases of amenorrhœa;" and again, "that it may take the place of the menses must be admitted." Now, if it may do so when the stomach is sound, how much more likely will it be to occur when the blood-vessels of that organ are already weakened by ulceration of its internal tunics. Speaking of the necessity of giving the stomach as much rest as possible in this disease, so as to favour cicatrization of the ulcers, some striking cases are mentioned, in which life was sustained for several weeks by the administration of nutritive enemas. It must not be forgotten that such cases call for a very searching scrutiny. Hunger and thirst are very imperious appetites, and the number of patients must be very small whom even the fear of death would restrain from yielding to their clamorous demands.

The chapter on Intestinal Obstruction is particularly valuable for the clearness of the diagnostic differences which it describes as existing between the several forms of the disease. An article on Functional Obstruction admits that "persistent obstipation, accompanied with vomiting of so-called stercoraceous matter, colic, pains, etc., may occur, there is reason to believe, as a purely functional disorder." The author is inclined to this belief because he has observed the affection in nervous women chiefly. The reason is hardly a conclusive one; irregular muscular contraction, which is characteristic of such cases, affects the intestine, as it does all of the muscular organs, and must be very apt to produce invagination, just as we know that it does in the act of death, in children constantly, and not unfrequently in adults. There is at least as much reason why invagination should be overcome under these circumstances as when it takes place in persons entirely free from nervous excitability. Clinical evidence renders the latter in the highest degree probable; for there are instances of persons in perfect health being suddenly seized with all the symptoms of intestinal obstruction, after unwonted muscular efforts, and yet recovering entirely. Among others, Brinton reports such cases, and in one of them, when the patient some time afterwards died of a different disease, "the appendix cæci was bound by adhesion to the brim of the pelvis, and several bridles of adhesion extended to portions of the small intestine at this part; one of them was very long, and had apparently led to constriction, and the previous symptoms of strangulation."

The article on Dyspepsia is very judiciously written; but it more than once enounces the doctrine which we have already ventured to pronounce erroneous—that flatulent distension of the stomach and bowels may be due to "gas secreted or evolved in some way independently of chemical changes in the ingesta." It was a not uncommon symptom among soldiers during the late war, and among them we suspect that it sometimes arose from another cause pointed out by the author, viz., a habit of swallowing air; although it seemed attributable in certain cases to the use of bread made without yeast, the so-called aerated bread. There is doubtless such a thing as scientific cookery, but if this be one of its triumphs, heaven preserve us from becoming its victims! Gastric hemorrhage, we are told, is sometimes simulated by hysterical females, etc. We remember being very much amused with the learned explanations suggested by an eminent physician of the case of a young lady who excited the greatest alarm in her family by occasionally spitting blood, which was always in small quantity, of a dark colour, and mingled with saliva. The catamenia were regular. For these reasons, and because there was no discoverable organic cause of the hæmoptysis, we assumed that it was voluntarily produced. Not long afterwards the patient gave unquestionable evidence of hysterical insanity, and she was removed to a hospital, where she still remains, after the lapse of six or seven years. Among the causes of gastralgia the author omits one of the most frequent, chewing tobacco. A curious illustration of the fallacies arising from imperfect observation is furnished in the chapter on Gall-Stones, where the author relates several cases in which patients who had taken large doses of olive oil for the cure of gall-stones were convinced of its efficacy by finding in their alvine evacuations numerous rounded or oval bodies like sheeps' or goats' dung. These were nothing more than the concrete matter of the oil shaped by the intestinal movements. The subject of Diarrhœa is well treated, its different forms being plainly characterized. Some interesting remarks are made on fatty diarrhœa, without, however, clearing up the obscurities of the subject. Diarrhœa from exposure to cold is attributed to the irritant action of undigested aliment in the large intestine; it is much more probably due to a suppression of the cutaneous exhalation. Intestinal hemorrhage, or enterorrhagia, is briefly but accurately described, according to the causes producing it. "Like gastric hemorrhage," the author remarks, "it may be vicarious of menstruation." This statement is not quite consistent with that already referred to in connection with diseases of the stomach. A case lately fell into our hands in which a lady was pronounced by her medical attendant to be dangerously affected with dysentery, because, on the proper date for menstruation, the previous period having passed without discharge in consequence of her exposure to cold, she had a profuse hemorrhage from the bowels. A mildly tonic treatment was used. At the subsequent epoch her menses reappeared, and her health was fully restored. The treatment of constipation, one of the most serious of the minor diseases, because it often leads to such an impairment of the health as to destroy the patient's happiness and usefulness together, has always appeared to us exceedingly difficult. The infarction of the bowel is easily overcome indeed, but seldom permanently, for the habits that occasioned it originally can rarely be given up for more wholesome modes of living. Although the author has little to propose in regard to this subject that is new, yet his views of the relative values of medicines and their modes of application, are very sound and judicious. On two points especially we are of his opinion—first, the danger of habitually using enemata; for the torpid bowel, like other sluggish organisms, will soon cease to do for itself what others volunteer to do in its stead; and second, the utter uselessness of belladonna as an aperient, in spite of the emphatic and confident eulogies of Trousseau.

In the article on Colic there is recommended, among other things, for its treatment a small enema containing a drachm of laudanum, and the advice is given to administer double this quantity an hour later, if relief is not obtained from the first dose. These doses appear to us exorbitant, and we cannot wonder that the author, after lauding this as "an efficient opiate treatment," should add, "some patients suffer considerably from the after-effects of the opium given, and this, in some measure, compromises the mutual satisfaction of the patient and physician in the success of the treatment." We have frequently treated severe intestinal colic without either this untoward result or that of occasioning prolonged gastric distress; but we have not found necessary doses half as large as those which are mentioned above. The author advises a similar method of administering opiates in cholera morbus. In that affection it is less objectionable, since a large portion is rejected of whatever medicine may be taken. The new fashion of administering the pulp of raw meat in cholera infantum suggests the not unimportant remark that in this manner it is not only quite probable, but very certain that tape-worm may be propagated.

The article on Epidemic Cholera is perhaps not as full as if it had been written under the expectation of a speedy advent of the disease among us, and with the light which the progress of the present epidemic has thrown on the method of its propagation. With these facts before him the author would scarcely have stated that "imported cases in situations where the disease had not previously existed do not lead to its diffusion;" nor that it is neither contagious nor infectious, particularly when it is admitted to be "portable," which is surely the same thing as its being either infectious or contagious, or both at once. If there is any fact in the history of cholera diffusion established above all others, it is that no case of the disease can arise independently of preceding cases, and the whole weight of evidence goes to prove that the disease is propagated by the excretions of the sick, and mainly by their infecting water which is used for drinking. We notice one omission, which, in the light of these propositions, is a grave one; we mean the diagnosis of epidemic from sporadic cholera. The identity of their symptoms is so perfect, except in degree, that this fact alone should, we think, have sooner convinced physicians that the immediate cause of the former is, like that of the latter, to be found in the action of some morbid cause upon the gastro-intestinal tract. In the one case, indeed, ordinary crude ingesta suffice to develop the specific phenomena; but in the other a special poison, which has been communicated successively by man to man, from the banks of the Ganges to the United States. The author dwells on the extreme importance of meeting the premonitory symptoms of cholera, the precursory diarrhœa, that is, by small doses of opium and astringents, among the latter of which, however, he omits mentioning the most valuable, as it was shown to be by the British Reports, simple chalk mixture, with or without tincture of kino or catechu and laudanum. In the fully developed disease, before collapse, he would rely mainly upon opiates in large doses; indeed, he recommends a grain of a salt of morphia, to be repeated at intervals of from half to three-fourths of an hour, if the first doses are quickly rejected. The dose mentioned is equal to six grains of opium, and we are constrained to say that it is excessive. It is true, as our author states, that the system, even in the early stage of the disease, is not readily affected by opiates; but, as this depends upon the greater or less absorbent power of the stomach, which cannot easily be estimated, we should shrink from incurring the risk to which we believe the patient would be exposed by such doses. Under the circumstances, the hypodermic injection of a solution of morphia in smaller quantities would seem to be greatly preferable. Among medicines, the author places exclusive reliance upon opium in the first stage of developed cholera. Not a word does he say of calomel and the thousand other remedies vaunted as specifics in this stage, in doing which he displays that wisdom which results from a careful study of the results of treatment in epidemic cholera. In addition, he lays down the important precept to keep the patient perfectly at rest, and give him very small quantities at a time of cold water, and occasionally a little spirit.

Nothing can be simpler than the treatment of this terrible disease; that is to say, in no other disease are the limits of medical power more distinctly marked, or the agents through which it can be exercised more definitely known.

Among the symptoms of acute general peritonitis, one is mentioned which has not, we think, been noticed by writers upon this subject. We allude to priapism, which was first described as a symptom of the disease by Dr. Rogers, of Louisville, and of which the author himself observed two examples. We met with it a year ago in a case of peritonitis from intestinal perforation, but at the time regarded it as a merely accidental phenomenon. Cold is admitted to be a cause of this disease, although not a frequent one, and reference is made to the liability to its attacks of persons who are obliged to work immersed in cold water. On the other hand, rheumatism limited to the abdominal muscles, it is said, must be exceedingly rare. We should be disposed, rather, to adopt the converse of these propositions as true. We have seen very many cases of muscular rheumatism of the abdominal walls, and never but one which had any claim to be considered simple idiopathic peritonitis; and even in that case the discharge of a hog's bristle per anum, in our judgment, set the claim aside. In one word, we believe, with Habershon, that peritonitis is *never* idiopathic in its origin. It is to be suspected that not a few cases of peritonitis, regarded as idiopathic, were really examples of epidemic erysipelatous peritonitis, which was first described as it occurred among children, by Abercrombie, we believe. In the treatment of acute peritonitis the author rejects the use of depletion, purging, and mercurials, and relies on opium alone, for which we are certainly not disposed to censure him, believing, as we do, that this single medicine secures all of the good which is attained by the compound treatment into which it enters along with the first mentioned agents. His remarks upon this subject will repay the reader's attention.

The article on Ascites, or, as it is called by the author, Hydro-Peritoneum, is a very excellent and practical one; but we take exception decidedly to his speaking of the operation for its relief, paracentesis abdominis, as a "trivial one," and of its repetitions as "innocuous." In not a few cases acute peritonitis follows this operation; it is painful, and to persons of sensibility it has a shocking appearance. Still it is often imperatively necessary. A modification of it is sometimes possible, when the integument covering the umbilicus becomes gradually distended in the form of a round fluctuating tumour. A painless puncture with a sharp lancet then suffices for the evacuation of the fluid. In a case of this sort we performed the operation nearly thirty times during two years before the patient's death. Neither our author, nor other contemporaneous writers, so far as we know, allude to this possible alternative for the more painful procedure; but it is referred to in one of the Society Memoirs published in Great Britain in the last century.

The chapters on Diseases of the Liver require no particular notice except as being written with the most recent light thrown upon the subject, and as containing a protest against mercury as the specific remedy for hepatic disease. While denying it this virtue, the author falls into the error of regarding the usual brown colour of feces as produced by the presence of biliary colouring matter. If this were so the contents of the ileum should be darker than those of the colon, whereas the reverse is the case, as every one knows.

Congestion of the Brain is first considered among diseases affecting the

Nervous System. The author is of opinion that experimenters have fallen into a gross error in concluding that the cranium always contains the same quantity of blood, and that congestion expresses not a positive increase of blood in that cavity, but only a relative disproportion between the arterial and venous blood. He might have cited, in this connection, the cases and experiments used to illustrate the physical condition of the brain during sleep, and which show that the most ordinary and tranquil excitement causes the brain to project from its bony case wherever resistance is removed. In another place, speaking of meningeal apoplexy, he might have referred to the remarkable case of the great statesman, Daniel Webster, in whom a membraniform fibrinous coagulum, resulting from a violent fall, covered the convexity of the brain for many months before his death, and with but little disturbance of his extraordinary intellect. The whole of the article on apoplexy appears to us logical and sound, and none the less so that it does not offer solutions of some of those knotty questions which concern functional and physical diseases of the brain and their distinctive phenomena. As might be expected, the author would restrict the use of blood-letting in apoplexy within very narrow limits. He points out accurately the conditions which contraindicate it, without so explicitly denoting those which call for its use. Yet he says plainly that if the attack be due to active congestion, and the heart be acting with normal power, the life of the patient may depend upon the prompt abstraction of blood; or again, if venous congestion of the face is marked, if the pulse be full, and no paralysis exist, bleeding should be employed. These conditions call imperatively for bleeding; but there are many, more or less compounded of these, and with paralysis, which will scarcely be benefited without it. Tact and judgment are never more necessary than here; but we are of opinion that in doubtful cases it is safer to bleed. The immediate effects, closely watched, will generally show whether the operation tends to good or evil.

The article on Sunstroke gives a fair exposition of the different pathological conditions which bear this name in common. A remark is quoted from a reporter of numerous cases of the affection, that a large proportion were attacked shortly after dinner, which would seem to imply some relation of cause and effect between the two events. As the period mentioned is precisely the hottest of the day, it is perfectly natural that the morbid effects of heat should then be most severe.

The article on Tuberculous Meningitis is, perhaps, proportioned in extent to the whole Treatise, but it is much less complete than would be desirable. The author is disposed to refuse a tuberculous nature to the minute granulations which are found in the membranes of the brain after death from this affection; but, as he elsewhere appears to regard as tubercles, even in the lung, only the crude yellow bodies, so called, his judgment must be accepted with this understanding. He does not even indicate a plan of treatment, doubtless because he regards the "termination as almost invariably, if not invariably, fatal." This is a more unfavourable view of the subject than appears to be warranted by medical records.

Cerebro-spinal Meningitis is treated of under its appropriate name, or, at least, under a more proper one than the popular title *spotted fever*, a title which was bestowed upon it by the vulgar during its first epidemic appearance in this country, but which was even then condemned as inapplicable to the disease by all physicians of authority who described it. It is to be regretted that the author does not appear to have been acquainted with the great mass of facts contributed to the history of this affection, both abroad and at home, and especially with those belonging to the first recorded epidemic of the disease in this country between 1809 and 1815, and some of the more complete histories published of its recent appearance, among which should be noticed that of Dr. Upham relating to an epidemic in North Carolina, the fullest account by far of its symptoms and lesions. He refers to an article, by an ingenious author, in which its identity with typhus is advocated. This has also been done in England by Dr. Murchison, who does not seem, however, to have found any one to agree with him. In his elaborate and almost exhaustive treatise on fevers, not a word is to be met with in the history of typhus which even suggests the possibility of cerebro-spinal inflammation occurring as a complication, even the most occasional, of that disease. Indeed, he now confesses as much, and claims to have been enlightened by the occurrence of several cases of typhus in which the symptoms of such an inflammation were met with. Now, it may fairly be asked which is the more probable—that no writer on typhus, since the days of Huxham, should have described cases of that disease with cerebro-spinal symptoms, or that Dr. Murchison should have exaggerated the importance of the lesions occasionally found within the cranium in typhus fever? It is well known that in many cases of typhus there is a profuse secretion of serum beneath the cerebral membranes, and more or less cloudiness of these latter. But there is a world-wide difference between these results of, for the most part, exaggerated functional activity, with imbibition of serum by the macerated membranes, and the effusion of inflammatory lymph and pus which is characteristic of cerebro-spinal meningitis. Dr. Mayne, of Dublin, we imagine, was as familiar as possible with typhus; but when, in 1846, he encountered an epidemic of cerebro-spinal meningitis, he at once recognized it as a different disease, and called it by its proper name. So, too, did Dr. Law in 1849 and 1866. They also pointed out one distinguishing feature, which, for Irish practitioners, must alone have been sufficient to prove the disease a different one from typhus; it was not propagated by contagion. Dr. Murchison knows, as well as any man living, that this statement, if well grounded, is fatal to his notion that the epidemic in question is a form of typhus fever, and he, therefore, strives to refute it, by showing that certain of the epidemics occurred under the same circumstances as those in which typhus appears. Nothing can be more inaccurate than this. If the disease has sometimes shown itself in crowded barracks, and even been confined to them, in numerous other cases it has prevailed in the most healthy localities, and attacked indiscriminately the poor and the rich, those who were the worst and those who were the best provided with the comforts of life. Such has been eminently the case in this country. Dr. Murchison suggests that the occurrence of typhus fever and of cerebro-spinal meningitis in the United States during the late war favours the opinion of their community of origin and identity of nature; but while typhus was generated to some, and indeed a very slight, extent by crowding, bad ventilation, and filth during the war, the other disease commenced several years before the war; commenced in the midst of peace and plenty, and in places as salubrious, by situation and the character of their inhabitants, as any in the world; began in New England, and then took fresh starting-points in Central and Western New York, whence it gradually advanced southeastwardly along the valleys of the Alleghanies, poured over Eastern Pennsylvania and Middle New Jersey, and down through the Atlantic States to North Carolina. It also extended westward along the borders of the great lakes to

Chicago. But it did not cross the mountains, or accompany the ceaseless caravan of human beings, citizens, and soldiers that filled the great highway through Pennsylvania; nor did it yield to the attraction of the crowded, squalid, and filthy portion of the population of New York City, as typhus must inevitably have done. In fact, its ravages, in proportion to the population among which it prevailed, were greater in salubrious country neighbourhoods than in large cities; and even in these, as in Philadelphia, its victims, so far from being found in almost the only localities where typhus has ever prevailed, in the negro district and in the almshouse, were selected from among the classes who live in plenty, and in the cleanest and most airy streets, and from among individuals who had everything in their persons and in their surroundings to secure health and long life.

Nor is the indirect proof derived from its non-contagiousness less weighty as an argument against its identity with, or even its affiliation to typhus. Of all who have written upon the subject from actual observation, whether among those who studied the first or the last epidemic in this country, or among those who have published the results of their accurate observations in Europe, not a single one has pronounced the disease contagious. Even the latest evidence that has reached us, Prof. Niemeyer's description of epidemic cerebro-spinal meningitis in the Grand Duchy of Baden, and the report presented to Parliament, by Dr. John Burdon Sanderson, on the disease as it prevailed about the lower Vistula, afford not the slightest countenance to such a belief, but, on the contrary, explicitly refute it. And shall we, then, be told that such a disease, which every one competent to express an opinion pronounces to be incommunicable by contagion, is identical with typhus fever, the most contagious disease in the world except smallpox?

It were easy to demonstrate that typhus and cerebro-spinal meningitis are diseases of widely different symptoms, whether considered in their entire course, or in respect to their individual phenomena. But we have room to notice only two or three. The characteristic mulberry rash of typhus is familiarly known to be a true exanthem, on its first appearance elevated slightly above the surface of the skin, and disappearing under pressure. It is only at a later period that this eruption, which may readily be mistaken for that of measles, is converted into petechiæ, that is to say, into spots which are really ecchymoses, and which no longer pale or disappear when pressed upon.

The eruption of spinal meningitis, is petechial from the first, *i. e.*, is formed of true ecchymoses in the tissue of the skin, and at no period of its existence changes under pressure. In other words, it presents precisely the appearances of the ecchymoses which characterize a large number of blood diseases, and even phlegmasiæ of a low type. Moreover, this eruption, such as it is, is so far from belonging essentially to the disease that it is present in less than one-half of the cases. In the United States, where it has most frequently been met with, this proportion perhaps overstates the truth; while in many European epidemics its occurrence must have been quite exceptional, for it is not even mentioned by their historians, and another but almost insignificant eruption, herpes labialis, is given as the sole cutaneous phenomenon, and even as being a distinctive characteristic of the affection.

Another phenomenon presents so striking a contrast to the symptoms of typhus, that its mere mention will be almost sufficient, viz., opisthotonos. In no treatise upon typhus fever is this symptom even so much as mentioned as belonging to that disease, not even in the work of Dr. Murchison, nor even in his more recent communications where he claims the existence of meningitis as an occasional complication of typhus.

The only other point to which we shall allude out of many that present themselves, is the state of the blood in the two affections. In typhus it is well known the blood is darker and more liquid than natural, and the proportion of its fibrin is diminished in a marked degree. But the analyses which have been made of this fluid in cerebro-spinal meningitis exhibit a very different character. In the examinations by Dr. Ames, during the Montgomery epidemic, the proportion of fibrin varied between 3.64 and 6.40 in a thousand parts; and during the epidemic of 1840–41, at Strasbourg, Dr. Tourdes found the proportion of this constituent of the blood to vary between 3.90 and 5.63. In each case, therefore, the minimum proportion of fibrin was greater than the average proportion of that constituent in healthy blood. The blood in cerebro-spinal meningitis, then, resembles that of an inflammatory disease, and not that of a toxæmic condition like typhus. The petechiæ and vibices, which occur in a minority of the cases, and which appear to have suggested the idea of its relationship to typhus fever, are not characteristic of typhus fever alone, nor even of those forms of disease alone in which the typhoid type predominates. On the contrary, they are far more strongly marked in scurvy and in purpura, in neither of which does this type present itself, unless in exceptional cases. In the former, at least, the proportion of fibrin is above the normal standard.

We might carry this demonstration further did it seem necessary to render the argument more complete; we might even prove that cerebro-spinal meningitis does not present the typhoid state in a majority of the cases; and, indeed, very rarely in those which terminate favourably. It would seem that the phenomena of this state, occurring in connection with petechiæ and ecchymoses, have led some persons into the error which we have endeavoured to expose. But neither that state nor any special appearance of the skin is characteristic of the disease. Many cases, towards the close of each annual epidemic of meningitis, have presented this condition in previous epidemics as well as in the existing one. Even while writing, we have under our care a lady of robust health who, without the slightest premonition, was attacked shortly after breakfast with so violent a pain, shooting from the nape of the neck through to the forehead, that, although a person of remarkable fortitude, she shrieked with anguish. Her sight became affected; there was slight strabismus, with pain and stiffness along the spine, neuralgic pains in the limbs, and obstinate vomiting for many hours. Profuse depletion by cups and purgatives was used with good effect; blisters to the spine, and opium and quinia were subsequently prescribed, followed at a later period by the iodide of potassium. Three weeks have been required to establish full convalescence. Now, in this case, there was neither delirium nor coma, and not the slightest trace of discoloration, nor any excessive heat of the skin. Will it be pretended that this was a case of typhus fever?

Still more recently, and while these pages were passing through the press, a female was brought into our wards at St. Joseph's Hospital, of whom the following account was obtained. She was about twenty years of age, of large and well developed frame, and had a remarkably clear skin. While hanging clothes out to dry, she was attacked suddenly with a severe pain in the head. Soon afterwards, she was carried to the hospital, where her chief complaint was excruciating pain in the head and back of the neck, and this, rather than coma or delirium, rendered it somewhat difficult to communicate with her. From the first, her head was strongly retracted, and her hands, and, ultimately, both the upper and lower extremities, were mottled as if by venous congestion. There was no eruption whatever. She lay, by preference, in a prone position; her pulse was about 100; her skin warm, but not hot; her abdomen was not tympanitic, and her bowels were confined. She died at the end of a week; and half an hour before death, she was not comatose, but understood what was said to her; she was then unable to swallow. There was neither convulsion nor paralysis. On examination, 24 hours after death, the dependent portions of the body were deeply purple, but the anterior surface was perfectly pale. The upper surface of the brain was unusually dry, but the veins were turgid. At the vertex, on both sides of the longitudinal sinus, there existed strong adhesions by lymph. A deposit of semitransparent and very firm lymph existed upon the optic commissure, and extended, but less in thickness, over the pons Varolii and along the front of the medulla oblongata. It ceased at the cervical portion of the cord, but here the membrane was dull and clouded. Lymph existed also in the fissure of Sylvius, on either side. The central cavity of the brain contained but little fluid; but the right optic thalamus was pulpy, and the left softer than natural. There were no tubercles. The blood was quite destitute of coagula, and the inner surface of the spinal canal was stained almost black.

We cannot quit this subject without adverting to the fact that the successive epidemics of meningitis have occurred almost simultaneously in the United States and Europe. While, during 1814–15, it was touching its decline in this country, it prevailed in the South of France. The most extensive epidemic of it in France, Italy, Algiers, Gibraltar, &c., from 1838 to 1847, had its counterpart in the epidemic of our southwestern States, between 1842 and 1850. So, while the disease spread through this country from 1857 to the present time, several local epidemics of it occurred in Germany and in Ireland between 1863 and 1866.

But we must hasten on. The different forms of paralysis are treated of concisely, and very clearly considering the difficulties inherent in the subject, and the conflicting results of clinical experience, and still more of physiological experiments. A very curious case is related of permanent paralysis of the sensibility of the rectum and anus following a fall upon the buttocks; yet there was no paraplegia, no paralysis of the bladder, nor any impairment of the sexual function. Under "hemiplegia" the difficulties which involve the diagnosis of its proximate cause are very well described, and consequently those which environ its prognosis. Thus, although the author describes a *functional* hemiplegia, which he admits to be rare, the existence of such an affection must be inferential only. However that may be, it is certain that cases of paralysis sometimes occur, and that not in hysterical, nervous, or even young, persons, which have every aspect, at first, of a central and organic origin, but which speedily and perfectly recover. Two cases are related, both of old men, in which, without any appreciable cause, more or less complete hemiplegia occurred, but disappeared entirely in the course of a few days. A similar case recently occurred in our own practice. A gentleman nearly seventy years old, but originally of a vigorous constitution, consulted us for dyspeptic symptoms, and slight, but general, muscular rheumatism. While examining him, a marked irregularity of the pulse was observed, and on auscultng the heart its impulse was feeble, and its first sound wanting in clearness. A week later, all of these phenomena had disappeared, and the usual health seemed restored. A few mornings afterwards, while performing his ablutions, he suddenly found himself deprived of power in the left arm, and that of the left leg was slightly impaired. On attempting to call, he was unable to articulate, and swallowing was almost impossible. The paralysis diminished within one hour sufficiently to permit the patient to travel some ten miles, by steamboat, to the city. When we visited him, it had still further abated, and the speech was perfectly intelligible. Nevertheless, remembering the symptoms on his previous visit, we were disposed to feel apprehensive of the result, and therefore enjoined great circumspection. In the course of three days, however, hardly a trace of the paralytic seizure remained. In this, and in our author's cases, we should be inclined to suspect the temporary obstruction of an artery by a coagulum or embolus.

A remark is made under "Paraplegia" which has an important medicolegal bearing, viz., that "complete paraplegia, affecting both sensation and motion, is not incompatible with sexual passion and procreative power." An exceedingly interesting illustration of this statement is given at p. 573. Progressive locomotor ataxia is briefly, but clearly, described. A singular case is referred to—

> "Which was under observation for several years at Bellevue Hospital. Whenever the patient attempted any volitional acts, the contortions of the limbs and body were such that he appeared to be performing for the surprise and amusement of the spectators, and it was difficult at first for the medical class to repress manifestations of mirth."

These words accurately describe a case which, in our student days, was under treatment at the Pennsylvania Hospital, where it was regarded as a case of chorea.

The functional nervous affections are discussed by the author with great plainness, and, as we think, with precision and accuracy; neuralgia, epilepsy, and hysteria occupying the largest space. Two very interesting cases of hysterical coma, or trance, are given, the first of which is singular from its occurrence in a male. The article on delirium tremens is a very good one; but it confounds this term with *mania à potu.* The former is a consequence of the withdrawal of alcoholic drinks; the latter is the direct effect of continued and excessive indulgence in them, and is synonymous with *delirium ebriosum.* The precepts for their treatment are, for the most part, sound. We especially agree with the statement as to the utility of muscular exercise carried to the point of fatigue. When it can be systematically used, neither opium, nor tartar emetic, nor, still less, digitalis, will be required, and alcohol very sparingly. The worst possible treatment of the disease is to shut its victim in his chamber.

Diseases of the urinary organs are treated of rather briefly; but of albuminuria, a full, accurate, and very interesting account is given. The same may be said of diabetes. A case is mentioned of the spontaneous cure of this disease, which is usually regarded as inevitably fatal. We have under observation a similar case, in which enormous quantities of sugar in the urine were replaced by an equally large proportion of urea, which also ultimately declined nearly to the normal standard.

The concluding section, devoted to fevers and other general diseases, is one of the best in the work. The labours of the author in this field are so well known, that any detailed account of them here may be dispensed with. It is hardly necessary to state that he adopts a humoral pathology, as alone sufficient to explain the phenomena of these diseases. This, which was long ago an admitted principle, for a time became heretical, but once more occupies its place in the orthodox medical creed. Febricula, or ephemeral fever, is confounded by the author with simple continued fever, which is a very different affection, and one which is often mistaken for mild typhoid fever. The consideration of typhus is not sufficiently separated from that of typhoid fever, particularly as the author is at pains to point out, as he does very clearly, although too briefly, their non-identity. In his statement that "neither typhus nor typhoid fever, as a rule, is experienced twice," he places the two diseases on the same level in this respect, and improperly, as we conceive; for while the recurrence of typhus is not uncommon, a second attack of typhoid fever is extremely rare. In the treatment of typhus, the author infers, from comparative trials which he made, that the administration of sulphuric acid is capable of diminishing the mortality of the disease nearly one-half. Other acids were used by various other physicians, with alleged benefit, which was attributed to the action of the medicine in counteracting the alkalinity of the blood. We should imagine that the removal of an effect is not very apt to destroy, or even to influence, a cause. *If* the acids do good, a more reasonable supposition, we think, ought to be invoked to explain it. The author advises the administration of tartar emetic in the active delirium of typhus, in imitation of Dr. Graves. But he does not recommend doses more than half as large as those prescribed by the great Dublin physician. It is perhaps not irrelevant to notice that in most of the cases in which Dr. Graves employed this medicine, leeching and purging had previously been used, the head had been shaved, and the neck blistered; and also to inquire whether the delirium was not, in some degree at least, due to the evacuant and exhausting treatment. It may also be inquired whether the cold douche or the warm bath would not have been more efficient and less hazardous? The author furnishes some exceedingly gratifying statements regarding the beneficial influence of pure air in the treatment of continued fevers, and illustrates them by results obtained during the late civil war. While describing the incomparable benefits of alcohol in these affections, he is careful to warn against its premature employment. The customary mode is often more injurious than useful. Nature is overstimulated while she is still competent to her task; and when, at last, exhaustion overtakes her, stimulants are unavailing to arouse her. A doubt is expressed as to whether "erysipelas" is a correct synonym for the epidemic disease known as "black tongue," inasmuch as the eruption is very far from constant; indeed, it occurs in only one-sixth of the cases. The criticism appears to be well grounded. Among the contrasts between yellow and remittent fever, one is omitted by the author which appears to us of primary importance. The former disease prevails exclusively in localities bordering upon salt water, the latter in the neighbourhood of fresh water chiefly. The eruptive fevers are fully and accurately described. The communicability of scarlatina by the sick and by fomites is very positively maintained, and several striking illustrations of it are presented. This opinion agrees with that of the most authoritative of recent writers upon the subject, but it is strongly dissented from by others. The article on diphtheria is remarkable for its excellence. It is curious to observe how the author, in common with nearly all judicious practitioners, rejects local applications, except as palliatives, notwithstanding the scarcely qualified eulogy which they once received from such eminent physicians as Bretonneau and Trousseau. He adopts the more rational and approved method of sustaining the system until the morbid process against which it is contending is exhausted. Articles on rheumatism, gout, scurvy, and purpura close the volume.

In the review which we now bring somewhat abruptly to a conclusion, we have abounded in criticism rather than in eulogy. This we should not have ventured to do, had not the defects, in proportion to the merits, of the work before us, been so minute. The latter speak for themselves, and will readily be appreciated by the judicious reader; the former might pass unperceived or uncorrected, and so tend to damage the author's reputation for certain admirable qualities as a medical teacher, which a just estimate of his treatise cannot fail to confirm. A. S.

ART. XXI.—*The Transactions of the American Medical Association.* Instituted 1847. Vol. XVI. 8vo. pp. 869.

IT has been suggested—and the suggestion comes to us from many quarters—that the putting forth annually by the American Medical Association of its bulky volume of *Transactions* may not be productive of an amount of good to the profession and of credit to the Association, by any means adequate to the labour and expense incident to its publication. It is very certain that the series of sixteen volumes that have appeared comprise a number of reports of a highly interesting character, with many scientific and practical papers of unquestionable value. Nevertheless, were a selection to be made for publication from among the several reports and essays read annually before the Association, by a committee, of which the members shall have the requisite talents and information, and sufficient independence of character to act with impartiality, a volume might be issued, each year, more creditable to the Association and more useful to its members as a work of reference. It is true that, by this plan, the yearly volume of *Transactions* would be very considerably diminished in bulk; but in the same proportion it would, we are satisfied, be increased in intrinsic value. The Association was not organized for the preparation and publication of mere compilations on different medical topics, and these compilations not always prepared by those who are the best qualified by talents and experience to separate the true from the false—the established from the conjectural—in theory or in practice. The leading objects of its organization were of a much higher character—to secure a uniform and more enlarged and efficient standard of medical education throughout the country; to promote a greater originality and independence in our medical literature; to excite a spirit of original and cautious investigation, whether for the purpose of testing the validity of received views and modes of practice, or for the development of new truths in one or all the branches of medical science and medical art; and of arriving, if possible, at a more intimate and complete knowledge of epidemic, zymotic, and endemic diseases.

The address of the President, Dr. N. S. Davis, of Chicago, Ill., in the present volume, is a very able, business-like paper. Its main subjects are a sketch of the past history, the present organization, and future prospects of the Association. The suggestions thrown out by Dr. D., in the discussion of the latter two questions, as to the proper sphere of operation for the Association, and the means best adapted to increase its influence for good, and insure its permanency, are pertinent and practical, and demand the careful consideration of all its true friends.